



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

A Chemistry Manual. By JOHN WHITMORE. Chicago: Atkinson, Mentzer & Grover.

This is one of the latest additions to the almost countless number of laboratory manuals for secondary schools. The *Manual* has the excellent loose-leaf feature, the pages being held in an attractive cover by means of the best clasp we have seen.

There is nothing essentially new with reference to the treatment of the subject, but it commends itself to instructors because of complete and explicit directions for each experiment, and because of the ease with which experiments may be removed or new ones added. Because of the definite questions upon each experiment, the teacher's work of correcting notebooks is materially lessened, but it seems that in many cases this same feature minimizes the value of the experiment. It is unfortunate that in several instances the drawings have been taken from ancient manuals or made from antiquated apparatus. The author has fallen into the fad of mistaking chemical shorthand for good English and mixes in his symbols and formulæ with questions and statements.

R. H. BROWNLEE.

UNIVERSITY HIGH SCHOOL,
Chicago.

Fundamentals of Child-Study: A Discussion on Instincts and Other Factors in Human Development, with Practical Applications. By EDWIN A. KIRKPATRICK. New York: The Macmillan Co., 1904. Pp. xxi+384.

In his preface the author explicitly states the purpose and scope of his text, which is an "attempt to present, in an organized form, an outline of the new science of child-study for investigators, students, teachers, and parents." It is the fruitage of fourteen years' experience in studying and teaching child-study, supplemented by an experience of half the length of time as a parent.

Instead of following out his original intentions of summarizing all the principal child-study investigations, "only a few specific facts and figures are quoted," the foundations of the science in other sciences is emphasized, and prominence is given "to the more general, permanent, and practical truths thus far revealed by students of children."

In his initial chapter the topic is given as the "Nature, Scope, and Problems of Child-Study," and the subtitle to the same, "Difference between Children and Adults," gives the angle from which the subject-matter is viewed and indicates his method of procedure in the treatment of the same. The systematic study of children is said to be due to the fact that people note and desire accurately to express the physical and mental differences between children and adults. Thus the science owes its birth to the impulse to exploit and explore this hitherto unsurveyed area of human life, as well as to the educators' practical interest in definitely determining the order of growth of powers whose reconstruction it is his avowed purpose to bring about.

The scope of the field is limited by birth, on the one hand, and by maturity, on the other, and the science is concerned with those characteristics which are present at birth "in so far as they differ from those of adults," and with the general laws of development governing changes in size, structure, and instinct.

This is followed by a discussion of the forms of activity that are native, they being classified as automatic, reflex, and more complex activities which are named instincts.

These instincts the author does not think it possible to classify on the basis of the stimulus that calls them forth, or the kinds of movements made, or the bodily or mental states of the animal, but "a classification based on the ends gained by instinctive acts will apply to all forms of animal life, including man." With this criterion in mind, instinctive acts are discussed under the following captions: individualistic or self-preservative, parental, group or social, adaptive, including imitation, play, and curiosity, regulative, and a miscellaneous group which more or less resists classification, such as tendencies to collect and enjoy ownership, to construct or destroy, to communicate, and the æsthetic tendencies to adorn self or objects.

This is preliminary to a discussion of the early development of the human infant, whose movements and early mental states are treated from the same point of view. The more or less rough classification of modes of learning is touched upon briefly as "the trial and success method," the "imitation method," and "the understanding method." Several pertinent observations are made as to the failure of teachers to rely sufficiently upon the natural order of learning and of educators to recognize the fundamental character of instincts, since they are "the basis of all intellectual, emotional, and volitional development."

The problem of the relation of instincts to intellectual development is a vital one for students of children, and, while it must be acknowledged that experience and training exercise a determining influence upon growth in intelligence, nevertheless the rôle which instincts and instinctive interests play must neither be overlooked nor minimized. The discussion which follows in succeeding pages, although excellent in many particulars, is a study, not so much of the "innate laws of child development"—a task which the author sets himself—as of the general laws of habit and association. This is succeeded by a survey of some general truths concerning heredity, the social forces making for communality, and those tending to produce individuality; and an additional digression follows in a brief account of "those abnormal conditions and defects which are of the most significance to parents and teachers."

In many ways the text fulfils any expectations of the reader that a perusal of the author's preface may have awakened.

One is confronted by a slight ambiguity in the title of the text, inasmuch as *Fundamentals of Child-Study* may mean the essentials of the science, or a discursive presentation of the fundamental elements in immature and developing human beings—which, as a matter of fact, the body of the text more nearly approaches. This comes out in the author's discussion dealing with the origin of child-study and in his statement of its cardinal problems. There may be good ground for an honest query as to whether the origin of child-study is necessarily due to a growing sense of the differences between children and adults, or whether it is an outgrowth of the increased interest in our day and generation in all that pertains to human nature; especially is this true since the genetic method has dominated in every realm of scientific inquiry.

Further, there is a liability for misunderstandings and misconceptions relative to the tasks and problems which child-study sets for itself, when it is declared that it "is concerned with all the characteristics that are present at birth, in so far as they differ from those of adults, and with the general laws of development."

Children *per se* ought to prove interesting to scientific students, not because they differ from adults markedly in mental and physical processes. This, I am sure, no one believes more firmly than our author, but, unless it is borne in mind, the old-time educational doctrine, which our author recognizes as decadent, that boys and girls

are little men and women, reappears in a new form in the asseverations of certain present-day psychologists, that the processes of the child's mind find their complete expression in terms of their *relation* to those of the normal human adult.

In general, it may be said that the spirit and aim of the book furnish a stimulus in the right direction. The author provides a list of books and journals, and at the end of each chapter a list of suggestive readings, the majority of which should furnish a point of departure, if not a point of entrance, to a more extended study of the subject than the text aspires to. It ought to prove a valuable handbook, if wisely manipulated by the instructor, for elementary students of education of some of the best things in child-study.

D. P. MACMILLAN.

CHICAGO.

The Child: His Thinking, Feeling and Doing. By AMY ELIZA TANNER
Chicago: Rand, McNally & Company. Pp. 430.

This book is, in fact as in purpose, the work of one who has attempted to collate "the mass of material which has accumulated on child-study." Its object, the author tells us, is "to outline what has been done, to show breaks in the outline, and to point out places for future work." In pursuance of this end there is a sort of rough adherence to the subtitle of the text, each function treated not necessarily as exclusive of the others.

The physical nature of the child is discussed under the captions, "Growth of the Body," a less well-named chapter on "Abnormal Bodily Conditions," and some ten chapters later the subject is reverted to specifically again under the title "Growth in Control of the Body." Throughout this treatment of the physical nature there is a more or less successful attempt to correlate physical and mental development.

The subject of his psychical development is sketched, on the intellectual side, under the rubrics "Sensation," "Perception," "Memory," "Imagination," "Conception," and "Reasoning," and on the affective side this growth is traced through "Feelings," "Emotions," and "Sentiments." Then follows a third step, which attempts to "trace the expressions of his thoughts and feelings in his instinctive actions, in his speech and imitation, and in his play, drawing, and music." To sketch the plan in outline, the subject-matter of the text is presented, not under the headings "Thinking," "Feeling," and "Doing," but rather in the following topics: the physical growth of the child, his mental development, and, lastly, the movements by means of which the child expresses this mental life. This order of presentation some might think not specially adapted to do justice to the facts nor to the students of these data. There are certain chapters that deserve special mention, some because of their merit, such as those treating of "Memory," "Imagination," "Conception," and "Reasoning," and the chapter on the various forms of "Movements;" and others, especially those chapters that deal with the so-called physical nature of the child, that might, with advantage, be replaced in the text or even rewritten.

The author gives at the end of each chapter a number of references, which are more or less pertinent to the topics discussed, and which ought to prove serviceable in corroborating or correcting the citations made, or in carrying the student beyond to a more complete consideration of what has been learned about child-nature and child-education.

It is difficult to determine the class of readers to whom the book is adapted. In the hands of parents, or in certain types of educational clubs, it ought to prove ser-